

**CAST LASER OPTICAL BENCH****ABSTRACT**

An optical bench 10 is cast from a single piece of material and provided with a number of optical component supports 14 which extend upwardly from a base 12. The optical component supports 14 are integral with the base 12, increasing their rigidity. The bench 10 may be cast with additional material in strategic areas to allow for future optimization of the bench 10—for example, the mounting of specific optical components throughout the bench 10. Further, the bench 10 may be provided with regions 24, 26, and 28 of varying rigidity by placing support struts 68 closer together in areas where greater rigidity is required. Apertures 30 may be provided in the bench 10 to enable the routing of conduits through the bench 10.